

### **Remarks**

The Examiner alleges that the claims include material directed to intended use, which is not given patentable weight. However, the claims contain structure having specified functional limitations of the claimed structure, and these same structural-functional limitations cannot be met by the cited prior art because of the structural differences in the devices. Since all limitations of the claims must be taken into account when considering patentability, even features of the apparatus recited as “functional” limitations, (see MPEP 2114), if Exner cannot meet the structural-functional limitations recited in the claims of the instant application, it cannot anticipate the claims.

A fully translated copy of DE 19952998 (“Exner”) was supplied to the Examiner in the previous response filed by the Applicant. In the October 8, 2009, Action the Examiner states that he is still relying on a machine translation of Exner without giving reasons why he did not take into account the English translation that was filed by the Applicant. It is likely that the Examiner's understanding and interpretation of Exner may be colored by critical inaccuracies in the computer-based translation, and it is requested that any analysis and reference to Exner is derived from the more accurate translation provided.

With respect to the rejection under 35 U.S.C. §102(b) by Exner et al. (“Exner”) Figs. 1 and 2 of Exner show a cover plate 7b and a top plate 5. The cover plate 7b has a doctor attached to it that serves for distributing a new powder layer (see page 15, lines 7 to 10 of Applicant's English translation of Exner). The top plate 5 has a window 6b, through which the laser light for solidification may enter (see second-last paragraph on page 14).

The operation of the device of Exner is described in the lower half on page 15, where the processing of a first layer is described: In the 3rd step there is a 3/4 turn, by which powder is shifted from the supply containers 4a, 4b to the construction spaces 3a, 3b. Such 3/4 turn is a turn of the cover plates 7a, 7b. These cover plates in the 3rd embodiment of Exner each do have a cross-sectional shape of a quarter-circle (see page 14 at the bottom). With the construction spaces 3a, 3b and the supply containers 4a, 4b arranged alternately on a circle, the powder is shifted from the supply containers 4a, 4b to the construction spaces 3a, 3b, when the cover plates 7a, 7b (together with the attached doctors) are moved. In the 4th step, the "layer is processed". Here, "processing" means solidification of the powder by means of a laser (see third and fourth paragraphs on page 16).

Assuming that the cover plates 7a, 7b in Exner are a material application device and the laser is a solidification device, Exner does explicitly **not** describe a movement of the cover plates 7a, 7b while energetic radiation is entering the device through the window 6b in top plate 5. Accordingly, Exner neither discloses nor teaches the features of the last paragraph of Claim 30:

the **support and the material application device** are **moveable with respect to each other** in such a way, that **during the solidification of the applied layer** in said solidification region, **the layer**, which was applied before, **and the material application device are moved with respect to each other** and the support can be moved relative to the material application device in a rotational movement with feed in direction of the axis of rotation.

In the Examiner's view, the mere application of a new powder layer is an interconnection of this layer with the layer underneath. In order to rule out such a (mis)interpretation, in amended Claim 30 it is now specified that there is an

arrangement for ***solidifying*** the applied layer in order to interconnect it with the layer underneath. Such an arrangement for solidifying exists in the claimed invention in addition to a material application device. Moreover, the claim now specifies that during the solidification of the applied layer the layer underneath and the material application device are moved with respect to each other. Since Exner lacks this teaching it cannot anticipate Claim 30 or any claim that depends therefrom.

With respect to the obviousness rejection under 35 C.F.R. §103(a) of Claims 46 and 49, Kubo does not make up the above-note deficiency of Exner. Kubo is used merely to allegedly supply variation of feed velocity and/or rotation velocity. This does not address the above-noted deficiencies of Exner. Therefore, there is no *prima facie* case of obviousness when Exner is combined with Kubo.

Similarly, Masters, which is used under 35 C.F.R. §103(a) to reject Claim 61, does not supply the deficiencies of Exner. Masters is allegedly used to supply rotational movement on a non-circular path. However, this does not address the above-noted deficiencies of Exner. Therefore, there is no *prima facie* case of obviousness when Exner is combined with Masters.

Reconsideration is requested and notification that all the non-withdrawn claims are allowable over the cited prior art is solicited.

Respectfully submitted,

**McDONNELL BOEHNEN  
HULBERT & BERGHOFF LLP**

Dated: April 8, 2010

By: /Steven B. Courtright/  
Steven B. Courtright  
Patent Agent  
Reg. No. 40,966